FORM CF

Principal Investigator: _____

Proposal Title (1st few words): _____

RESOURCES REQUESTED FROM NASA

The resources described below are what many current and former investigators have asked NASA to provide to support their research. Please review the descriptions of existing combustion experiment apparatus, standard components/subsystems, facility capabilities and support instrumentation in the attached text; then complete and include this form in your proposal (with any needed supplementary text) to clarify any proposed experimental research.

The information requested in this form is needed by NASA to evaluate the total annual cost of supporting proposed experimental research to be conducted at the NASA Glenn Research Center. Provisions for work to be conducted elsewhere, i.e. your institution, should not be included here.

(1) Experiment Description. Please provide a brief written description of the experiments that you are proposing to conduct (or reference your proposal text). Include any known sizes, volumes, weights, power consumption levels, etc.		
(2) Existing Apparatus. Please indicate if any EXISTING experiment apparatus would be suitable for conducting the proposed experiments (see descriptive text). If so, please indicate here or attach a brief description of any modifications to the apparatus that would be needed.		
General Purpose Combustion Rigs	**YES / NO**	
Other existing apparatus (describe)		
(3) New Apparatus. Please indicate if you require a NEW experiment apparatus to conduct the proposed experiments. Please attach a brief description of the envisioned apparatus (or reference your proposal text).		**YES / NO**
(4) GFE Hardware. Please indicate the standard components/subsystems listed below that you ask NASA to provide as "Government Furnished Equipment" for a proposed new experiment apparatus (see descriptive text and costs). Indicate the year the item is first needed, i.e. yr1- yr4, and the NASA estimate of item cost.	**Year**	**Estimated Total Item Value**
(a) Standard Test Package Frame (16 " x 38" footprint x 38" tall)		
(b) Test Chamber: 25 cm diameter, 50 cm tall, four mid-height window ports		
(c) Power Distribution Module: DC voltages, computer switched circuits		
(d) Droppable Data Acquisition and Control System)		
(e) Battery Modules (24 VDC, 5 Amp-hour)		
(f) Gas handling hardware: valves, regulators, bottles, etc. Please describe.		
(g) Other item (describe)		
(h) Other item (describe)		
Total Estimated Value of NASA Supplied Hardware		
(4) Experiment Builder. Please indicate whether your organization proposes to build the new experiment or if you require that NASA build the experiment as "Government Furnished Equipment." Please attach any needed clarification.		**PI / NASA**

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(5) Test Facilities. Please estimate the required facility usage (in "weeks") for each year of your proposed experiments:		**GRC 2.2 Second Drop Tower: # Weeks @ 10 tests/wk**	**GRC 5 Second Drop Tower: # Weeks @ 2 tests/wk**	**Reduced-Gravity Aircraft: # Weeks @ 160 parabolas/ wk**	**Other NASA facilities: (indicate usage units)**
	Year 1				
	Year 2				
	Year 3				
	Year 4				

(6) Please describe the instrumentation or other resource requirements that you ask NASA to provide for your use while you are at the NASA Glenn Research Center for conducting the proposed experiments or for analyzing results:	
Vacuum Pumps: describe use: i.e. chamber evacuation between tests or continuos flow during tests; approximate flow capacity.	
Consumable Gases: indicate gas species, including "air," and standard cubic feet needed per week of testing.	
Imaging Equipment: video camera, film camera, lens, etc.	
Real-time Video Display (i.e. during the test); number of channels	
Electronic Image Processing (scanning, filtering, etc.)	
General Purpose Computers: describe use, e.g. experiment apparatus interface, data reduction and analysis, etc.	
Image Motion Analysis & Object Tracking System: describe the required measurements, e.g. flame propagation vs. time.	
Other (describe)	
Other (describe)	
Other (describe)	

Note: These resources are available in limited quantities. NASA will work with successful proposers to plan the allocation and scheduling of these resources.